

LISTING OF CLAIMS

1. (Previously presented) An apparatus, comprising:
 - a first device to transmit at a first frequency;
 - a first PN generator to generate a first PN sequence at a first offset;
 - a first spreader to receive and spread a first pilot data with the first PN sequence;
 - a second device to transmit at a second frequency;
 - a second PN generator to generate a second PN sequence at a second offset,wherein the first PN sequence is generated from equations different from equations used to generate the second PN sequence; and
 - a second spreader to receive and spread a second pilot data with the second PN sequence.
2. (Previously Presented) The apparatus of claim 1, wherein the first frequency uses a different CDMA format than the second frequency.
3. (Original) The apparatus of claim 2, wherein the first frequency is generated from a first CDMA format chosen from the group consisting of PCS, IS-95, IS-98, WCDMA, UTRA, IS-2000 and CDMA 2000, the second frequency is generated from a second CDMA format chosen from the group consisting of PCS, IS-95, IS-98, WCDMA, UTRA, IS-2000 and CDMA 2000 and wherein, the first CDMA format is different from the second CDMA format.
4. (Canceled)
5. (Original) The apparatus of claim 1, wherein the first PN generator is capable of generating a sequence based on characteristic polynomials comprising:

$$P_{7,1} = x^{15} + x^{13} + x^9 + x^8 + x^7 + x^5 + 1, \text{ and}$$

$$P_{Q,1} = x^{15} + x^{12} + x^{11} + x^{10} + x^6 + x^5 + x^4 + x^3 + 1 .$$

6. (Original) The apparatus of claim 1, wherein the second PN generator is capable of generating a sequence based on characteristic polynomials comprising:

$$P_{I,2} = x^{15} + x^{10} + x^8 + x^7 + x^6 + x^2 + 1 , \text{ and}$$

$$P_{Q,2} = x^{15} + x^{12} + x^{11} + x^{10} + x^9 + x^5 + x^4 + x^3 + 1 .$$

7-11. (Cancelled)

12. (Previously presented) A method, comprising:

generating a first PN sequence at a first offset;

spreading a first pilot data with the first PN sequence;

generating a second PN sequence at a second offset, wherein the first PN sequence is generated from equations different from equations used to generate the second PN sequence; and

spreading a second pilot data with the second PN sequence.

13. (Previously Presented) The method of claim 12, wherein generating the first PN sequence is based on characteristic polynomials comprising:

$$P_{I,1} = x^{15} + x^{13} + x^9 + x^8 + x^7 + x^5 + 1 , \text{ and}$$

$$P_{Q,1} = x^{15} + x^{12} + x^{11} + x^{10} + x^6 + x^5 + x^4 + x^3 + 1 .$$

14. (Previously Presented) The method of claim 12, wherein generating the second PN sequence is based on characteristic polynomials comprising:

$$P_{I,2} = x^{15} + x^{10} + x^8 + x^7 + x^6 + x^2 + 1, \text{ and}$$

$$P_{Q,2} = x^{15} + x^{12} + x^{11} + x^{10} + x^9 + x^5 + x^4 + x^3 + 1.$$

15. (Previously presented) An apparatus, comprising:

means for generating a first PN sequence at a first offset;

means for spreading a first pilot data with the first PN sequence;

means for generating a second PN sequence at a second offset, wherein the first PN sequence is generated from equations different from equations used to generate the second PN sequence; and

means for spreading a second pilot data with the second PN sequence.

16. (Previously Presented) The apparatus of claim 15, wherein generating the first PN sequence is based on characteristic polynomials comprising:

$$P_{I,1} = x^{15} + x^{13} + x^9 + x^8 + x^7 + x^5 + 1, \text{ and}$$

$$P_{Q,1} = x^{15} + x^{12} + x^{11} + x^{10} + x^6 + x^5 + x^4 + x^3 + 1.$$

PATENT

17. (Previously Presented) The apparatus of claim 15, wherein generating the second PN sequence is based on characteristic polynomials comprising:

$$P_{1,2} = x^{15} + x^{10} + x^8 + x^7 + x^6 + x^2 + 1, \text{ and}$$

$$P_{2,2} = x^{15} + x^{12} + x^{11} + x^{10} + x^9 + x^5 + x^4 + x^3 + 1.$$